Very small particulate bioactive glass has the property of exerting an anti-inflammatory effect when administered systemically. It appears that the bioactive glass suppresses the production of tissue necrosis factor alpha (TNF-α). TNF-α is a powerful pro-inflammatory cytokine that not only participates in the normal inflammatory response, but is also implicated in myocardial dysfunction and cardiomyocyte death in ischemia-reperfusion injury, sepsis, chronic heart failure, viral myocarditis and cardiac allograft rejection, as well as a host of other inflammatory disorders. Accordingly, by suppressing the production of TNF-α, the compositions reduce the likelihood of these disorders occurring.

IN THE CLAIMS

Please replace claim 4 with the following:

4. (Amended) The composition of claim 1, additionally comprising one or more therapeutic agents.

Please add new claims 12-15:

12. (New) A method for minimizing the production of TNF-α caused by an inflammatory response in a patient comprising administering an effective TNF-α lowering amount of bioactive glass particles with a size less than about 20 μm to the patient.

13. (New) The method of claim 12 wherein the bioactive glass particles are administered locally.

14. (New) A method for increasing IL-6 levels in a patient, comprising administering to the patient an effective, IL-6 increasing amount of bioactive glass particles with a size less than about 20 μm.